

74508XNAB
Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

David Kessler, et al

**ANTI-ALIASING LOW-PASS BLUR
FILTER FOR REDUCING
ARTIFACTS IN IMAGING
APPARATUS**

Serial No. US 08/770,381

Filed December 3, 1996

Group Art Unit: 2712

Examiner: J. Wilson

I hereby certify that this correspondence is being deposited today with the United States Postal service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Tara M. Piccone
 Tara M. Piccone

11-20-03
 Date

Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA. 22313-1450

Sir:

**DECLARATION OF PRIOR INVENTION IN THE UNITED STATES OR IN A
NAFTA OR WTO MEMBER COUNTRY TO OVERCOME CITED PATENT
OR PUBLICATION (37 C.F.R. § 1.131)**

PURPOSE OF DECLARATION

1. This declaration is to establish completion of the invention in this application in the United States, at a date prior to February 7, 1996, the date of Fukushima, U.S. Patent No. 5,579,420, and January 29, 1996, the date of Fukushima, U.S. Patent No. 5,646,399, which were cited by the Examiner as prior art.

2. This declaration is made by the joint inventors.

FACTS AND DOCUMENTARY EVIDENCE

3. To establish the date of completion of the invention of this application, the following attached documents and/or models are submitted as evidence:

RECEIVED
 JULY 21 PM 3:38
 U.S. PATENT AND TRADEMARK OFFICE
 COMMERCIAL PRACTICE GROUP
 PATENT APPEALS
 AND INTERFACES

a photocopy of David Kessler's personnel log marking August 3, 1995 as the day of invention.

a letter from Deltronics on how to cut Lithium Niobate crystals dated August 9, 1995.

a request for quotation dated August 22, 1995

correspondence from Cargille showing melt point and other characteristics dated August 25, 1995

a purchase order dated August 31, 1995

a purchase requisition to Cargille dated September 7, 1995

a shipping packlist from Virgo Optics containing Lithium Niobate (LN PRISM) filter parts dated September 29, 1995

a quotation from Crystal Technology, INC for Lithium filter elements dated May 14, 1996

a letter from V-A Optical Labs dated May 17, 1996 for lithium niobate plates

a fax cover sheet from Eastman Kodak for quotation from Crystal Technology for Lithium elements with detailed designs dated June 25, 1996

a quotation from Crystal Technology for Lithium elements dated July 1, 1996

a purchase order issued to Crystal technology against the July 1 quotation dated July 3, 1996

a letter from Prof. K. Gaylord, a noted expert on Lithium Niobate at the Georgia Institute of Technology concerning a prior discussion with Dave Kessler on Lithium physical properties dated August 16, 1996

an invention disclosure dated August 26, 1996

From these documents it can be seen that the invention in this application was conceived on August 3, 1995, which is a date earlier than the effective date of Fukushima '420 and Fukushima '399.

4. To establish the diligence of the applicants, from the time of their conception, to a time just prior to the date of the reference, up to the actual reduction to practice the following facts are provided.

From the date of conception to the date the patent application was filed diligent efforts were made to determine the best configuration for Lithium Niobate blur filters, as documented in the attachments to this declaration, listed above, samples of Lithium Niobate material were ordered as early as August 1995. Materials were received in September 1995.

A problem that was discovered is that because of the high index of refraction matching adhesives were difficult to find. An embodiment tested in December 1995 continued to exhibit adhesive problems and adhesives that were susceptible to scratching.

Fabrication and testing continued during the early months of 1996. A new problem was discovered in that temperature changes induced charge build up, and hence, dust collection. External conversations with Crystal Technology, Inc. and internal meetings were held to solve the problem.

By August 27, 1996 there was sufficient confidence in the design to submit a Kodak Invention Disclosure for preparation of a patent application.

5. This Declaration is submitted as part of a Request for Rehearing Under 37 C.F.R. 1.197(b).

DECLARATION

6. As a person signing below:

I/We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE

Inventor

Full name of first inventor David Kessler

Inventor's signature David Kessler

Date 11/20/2003 Country of Citizenship USA

Residence 20. N. COUNTRY CLUB DR. ROCHESTER NY 14618

Post Office Box _____

InventorFull name of **second** inventor Russell J. PalumInventor's signature Russell PalumDate 11/18/03 Country of Citizenship USAResidence 306 PELHAM ROAD ROCHESTER NY 14610

Post Office Box _____

InventorFull name of **second** inventor Alan C. G. NuttInventor's signature Alan C. G. NuttDate 17/11/2003 Country of Citizenship BRITAINResidence 47 KETTLE STOUD Mains, LINLITHGOW, SCOTLANDPost Office Box EH49 6SH

Dave Kessler 1995 Log

- 1 -

Looked for Fuji patents on AGX with Jim Owens
Asked Yip to come and help on the Roping
Sue- 9 channel - she is aligning it
Sipula- wants help on the LED printer

8/3 Blur filters meeting
looking for crystals
talked to Alan Nut

→ Alan suggested Lithium Niobate for blur filters
Wold on Pegasus, the led printer-it has to work at 300 g
8/4 Kwok - met and asked him to work on roping in his spare time
8/7 Sent a note to Tom Beraduchi on using Mark Meyers diffractives for T-~~□□□□~~cams
Talked to Carson and Owens on the use of grey silver layer which is bleachable
in processing for reducing the print up in printing taloha numerics
Talked to Randy from Crystal Tech about crystals

Day of invention

Jack is starting the 1:1 on the led with Carson
8/8 Sue is doing the 1/2 NA on the EP7. It is obvious that the depth of focus in
the array direction is the main problem now.

On tests the depth of focus is improved
Optics of Durst: Chuck Wilfield 11678 may know. He belongs to PPPI. He is a
strategic planner for the commercial markets and was involved with them and
visited them twice. He has MS in optics.. I got his name from John Bacilek at
76328

Info I got from him on Durst:
20 to 50 Ø wide, 2 argon ion laser and HeNe. Paper between rollers going vertical.
Polymer about 6 feet away about 30 cm on the side. Doing 200 dpi. You can look
with a 10x loop. Not too bad. Fuji better with text. They do 8 point test not
bad.

Also there is Light Jet which they do on film and will do on paper.
150 /min.

We have no problem with Agfa and Fuji and Konica and we develop a better
media.

Only 2 machines in the world.

8/8 Talked to Clark about the RIE problem with John Debeisis. Suggested I take
a PhD for marks position.

8/9 Snapshot meeting- show- printing plates-ceramic
Using CAIBE for micro optics

8/10 Mark Evans- asked him to make again the mericons

Talked to Russ Palum on the pegasus optics and quartz filters

8/11 an hour talk with Simpson

He said the fiber has a different f depending on aperture and then started
shouting- Do I am leaving if you do not agree etc? I told him how I see fibers and
that it is the same as with reflective parabolas so what? Retirement- will know
and give us 3 month notice.

Does not want ideas fun etc- has to make it work. Believes in his ray model
does not want to here about changing fibers. He started with a fiber and then
adjusted to real fiber and does not want to change. Alluded that he does not
believe my numbers-

He has to do a lot of stuff since I was not here.

(Nimas Lee mimenu)

8/11 talked to Gresko works for Einhouw. Wants to illuminate a print from
the side.

Doug Goodman- talked to him about the paper by Self
A name from Jack- Tom Dey did illumination and mapping equipment.
who may know about illuminating from the side.

I called him at 7370714 and he is willing to come for a meeting about Gresko's
problem

8/11 Andy- using 150 microns n=1.68 fiber, so f=90 microns. glass is LAKN14

Problem in imaging the modulator, cant get the square pattern.
Suggested to use a diffuser and a 7:1 microscope objective
8/15 called a meeting between John and Mike on process development features on the masks.

After he complained (john) to clark about lack of help in this area.

Amanda- talked to her about the efficiency test.

John griffith can only help in september.

Rus pallum did the design for filters and Juli helped him make them.

8/16 NSG gave a talk on planar optics

later a pegasus meeting where the head was discussed not hte lens afternoon- vacation- skeneatlas

8/17 suggested not to continue with anti aliasing w~~0000~~oalston patent.

8/18 Einhoaus started minilab activity, ATM and has Dave Paton who wants to do CRT and Autofocus

Amanda learns how to do measurements

Steve Noble: quartz coat 1200 per one filter because of the 2/1 spec. thickness not a problem. They use 3.75 mm now for the M6

FIRST OUT OF KODAK CONTACT

→ Bob Uhrin -Deltronics- easy to find lithium compared with good quarts. About 160 dollars for a 30 wafer. Somewhat less hard compared to quartz grows crystals for 25 years

II CONTACT

→ Virgo- craig Mizell- I will send them a sketch

8/21- Les- talked about filters- all day work on crystals

→ 8/22 Talked to Keon and also KTP - suggested an expert from Crystal associates Sue- tryed the plastic lense at focus- they survived except when they were dirty- so one can use them

talked to virgo and McGarvey 31102 on the DSC 420 and on the biaxial

8/23 SHB- about gen II and d.o.f.

We agreed to order from teledyne the refractive lenslets

8/24 Owens wants to start the patent work on AgX

→ Jim Mruk on cameras and filters

Mike long- consulting on triad- he has a mask and they do flash but they get a smaller pixel on the donor.

8/25- organizing the office

talkd to harrigan about Ian power, the canadian

on carbon about diamond scattering

calculated the performance of YALO3

8/27

Sunday- worked on the Pacific IR patent of ted witney and suggested to Kodak thatt the patents are not as good as MIT and relatet o equipment to make the IC. Spend 3-4 hours

8/28 anna hrycin- asked to help on the coating-said she is interested.

High brightness fibers- give 2x dof- whats next

should we cancel genII 16?

8/29- harrigan- talked about cascading

Mike long- about the panesls fo illumination

Mich Burbary- on plates - he gave a talk at the AVTV room

talked to Tai from Brite view technologies- will send samples. Will have a 4 by 5 in 3 weeks

→ 8/31 cvi on coating lithium

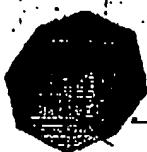
matlab for filters

quotation form KEON for the 1/2 NA

→ Debesis and Anna- reminded about hte coating issue

John said he can do a 1 to 2% at the edge one layer coating corning 7059 has 1.5355 in 546nm, 1.5311 for 633 and 1.5~~000~~44 for 435nm

9/1 calculatee MTF for circle



DELTRONIC

CRYSTAL INDUSTRIES, INC.

60 Harding Avenue • Dover, New Jersey 07801 USA • (201) 361-2222 • FAX (201) 361-0722

To: Kodak
 Dave Kessler
 From: R. Uhrin
 Date: August 9, 1995
 Subject: LiNbO₃

Dear Dave:

I have now had an opportunity to review the problem you and I discussed. According to my information the cut required for a separation of n_s and n_p in LiNbO₃ is 43.75° from the optic axis. For a separation of 20 μm at 500 nm the required plate thickness would be approximately 0.048 cm.

This is a practical thickness to fabricate and polish. However, I want to point out that thin plates deform somewhat after fabrication due to relaxation of the small amount of bulk strain. Some deformation is unavoidable. Typically, a 75 mm diameter plate has a surface flatness of 5 μm and a thickness variation of 25 μm .

If these values are unacceptable, I recommend one of the following:

- (a) the cut angle may be adjusted to utilize a thicker plate (as thick as possible to minimize deformation)
 - or
- (b) a larger separation (as large as possible) between beams is required to utilize a thicker plate.
 - or
- (c) a combination of both.

At this time it is not clear what would be acceptable as a starting point, but the problem appears to have a practical solution. I recommend some further discussion between us and then we can generate a quote on your requirement. Please contact me at your convenience.

Best regards,

A handwritten signature in black ink that reads "Robert Uhrin".

Robert Uhrin
 LN Product Manager

FACSIMILE TRANSMISSION

EASTMAN KODAK COMPANY
Building 65, Floor 2
Rochester, NY 14650

FAX Number
(716) 477-0736

7/26/95

Date 8/22/95

To: Mr. Craig Mizell , Virgo, fax (813) 845 4957

From: Dave Kessler. Phone: (716)477-4735
Request for quotation:

As per our phone conversation on last Friday, I attach the sketches of two elements I have in mind. I need 4 samples of element A and 8 of element B.
Please quote for uncoated and coated (AR for the visible) elements.
Please call me if you have any questions.

Thanks.

Dave Kessler

TOTAL NUMBER OF PAGES (INCLUDING COVER SHEET) 3

AST FHGH

CARGILLE
REFRACTIVE INDEX LIQUID SERIES FH
 $n(5893\text{ A}) 25^\circ\text{C} = 2.2000$
TYPICAL CHARACTERISTICS

23-SEP-93

<u>COMPOSITION</u>	Arsenic Tribromide, Arsenic Disulfide, and Selenium
<u>APPEARANCE</u>	Dark red glass
<u>ODOR</u>	Slight
<u>POUR POINT</u> (Working temp) °C	33
note: heat to working temperature by putting jar (lid loose) in water bath or heating a small amount on a slide; prolonged heating increases index; AVOID FUMES AND CONTACT	
<u>BOILING POINT</u> °C @ 760mm Hg	>211
<u>FLASH POINT</u> °C	Non flammable
<u>DENSITY</u> g/cc @ 25°C	3.624
<u>DENSITY TEMP. COEF.</u> gm/cc/°C	-0.0008
<u>COEF. OF THERM. EXP.</u> cc/cc/°C	0.0002
<u>SOLUBILITY:</u> very poor solubility in organic solvents; decomposes in water; is softened and decomposed by ethanol	
<u>CLEAN UP:</u> scrub with soap and water	
<u>COMPATIBLE</u> 3 week immersion: Phenolic, Polyethylene, Polypropylene, and Fluorosilicone Rubber Silastic 730 RTV (4 year immersion) (tests done on one example of each)	
<u>INCOMPATIBLE:</u> Will dissolve Acrylic, Cellulose Acetate, Epoxy, Nylon, Polystyrene, Polyurethane, Polyvinyl Chloride, Latex, and Neoprene; will swell Silicone Rubber (10 month immersion); will corrode Aluminum, Brass, Copper, and Steel; Will attack leaded glass such as microscope objectives, which should be protected even from fumes by a piece of coverglass stuck on the objective by silicone stopcock grease; fumes are corrosive; hydrolyzes with atmospheric moisture	
<u>TOXICITY</u>	High (request MSDS)

CAUCHY EQUATION: refractive index as a function of wavelength at 25°C

 $\lambda = \text{wavelength in angstroms (A)}$

$$n(\lambda) = 2.005296 + (5833478)/\lambda^2 + (3.223751E+13)/\lambda^4$$

SOURCE OR SPECTRAL LINE	WAVELENGTH (angstroms)	REFRACTIVE INDEX 25°C	% TRANSMITTANCE			25°C
			0.01mm	0.1mm	1mm	
e (Hg)	5461	2.237	57	0	0	
D (Na D1,D2 mean)	5893	2.200	84	17	0	
HeNe laser	6328	2.171	90	33	0	
C' (Cd)	6439	2.165	90	35	0	
C (H)	6563	2.158	90	36	0	
Ruby laser	6943	2.140	91	38	0	
GaAs laser	8400	2.094	95	58	0	
Nd:YAG laser	10648	2.06	97	76	6	
Diode	13000	2.04	98	86	21	
Diode	15500	2.03	99	93	46	
	20000	2.02	100	98	79	
	25000	2.01	100	100	98	

$$n_F - n_C = 0.152$$

$$\text{Abbe } v_B: (n_D - 1)/(n_F - n_C) = 7.9$$

$$\text{Temp. coef: } dn_B/dt \text{ } 15-35^\circ\text{C} = -0.0004$$

R.P.CARGILLE LABORATORIES INC.
55 COMMERCE RD. CEDAR GROVE N.J. 07009-1289 U.S.A.
phone: (201)239-6633 Fax: (201)239-6096

TOFAXL-11656

CABLE: CARLABSCI CEDARGROVERJ

Cargille

R. P. CARGILLE LABORATORIES, INC.

55 Commerce Road • Cedar Grove, New Jersey • 07009-1289 USA
201•239•8833

FAX COMMUNICATION - DATE:

8-25-95

COMPANY: Eastman KodakATTN: Dave Kessler

TEL: 716-477-4735

LOCATION: Rochester NY

FAX#: 716-477-0736

SUBJECT: TCCP for Meltmount 1.704 and
Series FH 2.20SENDER: PHYLLIS D. TORRISI

FAX#: (201) 239-8096

for Bob Sacher

3

NUMBER OF SHEETS IN COMMUNICATION INCLUDING THIS SHEET:If there are any problems with this communication, contact us by voice
telephone at (201) 239-8833.COMMENTS (if any):

PURCHASE REQUIREMENT

REQUISITIONER TO FILL IN ALL APPLICABLE UNSHADED AREAS
REFER TO PURCHASING PROCEDURE 7-001 FOR INSTRUCTIONS

REFER TO PURCHASING PROCEDURE 7-081 FOR INSTRUCTIONS

BUYER NAME 	CIAU E STOCKS <small>SHADED AREAS FOR PURCHASING USE ONLY</small>
-----------------------	---

DEPT. REQUISITION NO.		DEPT. REQUISITION NO.	
BUYER #	14	REQUISITION NO.	736 88240 W
SHIP TO:	SPL CODE: 14	MAKE	51-1 -
ITEM	JEAN AIR	TRUCK	<input type="checkbox"/> TRUCK
CHARGE NUMBER		ACCOUNT NO.	51-1 -
UNIT NO.	LEDDER	PLANNER (LAST P.O. OR PO NUMBER)	FOR
DELIVER TO:	TP	BLDG.	DOOR
ITEM	QUANTITY	UNIT	REF
1	4	EA	
2	8	EA	
SEE REVERSE SIDE FOR IMPORTANT INFORMATION REGARDING CHARGE NUMBER FIELD			
PROJECT/TITLE/SUBTITLE			
DATE REC'D IN PURCHASING INTERNAL DISTRIBUTION			

DEPARTMENT COPY

**REQUISITIONER TO FILL IN ALL APPLICABLE UNSHADED AREAS
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CHARGE NUMBER		ACCOUNT NO.	51-1 -
UNIT NO.	LEDDER	PLANNER (LAST P.O. OR PO NUMBER)	FOR
DELIVER TO:	TP	BLDG.	DOOR
ITEM	QUANTITY	UNIT	REF
1	4	EA	
2	8	EA	
SEE REVERSE SIDE FOR IMPORTANT INFORMATION REGARDING CHARGE NUMBER FIELD			
PROJECT/TITLE/SUBTITLE			
DATE REC'D IN PURCHASING INTERNAL DISTRIBUTION			

Virgo Optics

Division of II-VI Incorporated

1736 Commerce Ave., Port Richey, FL 34668
Telephone 813-845-3402 * Fax 813-845-4957

Shipping Packlist

Page

Current Date 9/29/95

Cust. Ord. Packlist ID: 00076

Cust. ID: EASTMAN KODAK

Cust. Order ID.: 00034

Order Date: 9/11/95

Ship To:

EASTMAN KODAK COMPANY
ATTN: RECEIVING, BLDG 82
66 EASTMAN AVE
ROCHESTER NY 14650

Cust. P/O Ref #: 14-736-88240W

Ship Via: AIRBORNE EXPRESS

FOB:

Terms: Due on receipt

Cust. Des. Shp. Date 9/29/95

Sale Rep. DH

Ord. Qty	Shipped Qty	Back Ord. Qt	Part ID
1.00	1.00	0.00	999880
2.00	2.00	0.00	999879
1.00	1.00	0.00	999878
4.00	4.00	0.00	999875
2.00	2.00	0.00	999876
2.00	2.00	0.00	999877

XVS(LN)32.2X23.2X1.0PRISMUN
LN PRISM, ITEM A
WORK ORDER #: 0044

XVS(LN)32.2X23.2X1.0PRISM1CN
LN PRISM, ITEM A
AR @400-700, 1 SIDE

WORK ORDER #: 0045

XVS(LN)32.2X23.2X1.0PRISM2CN
LN PRISM, ITEM A
AR @400-700, 2 SIDES

WORK ORDER #: 0046

XVS(LN)32.2X23.2X.707PRISMUN
LN PRISM, ITEM B
WORK ORDER #: 0050

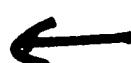
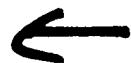
XVS(LN)32.2X23.2X.707PRISM1CN
LN PRISM, ITEM B
AR @400-700, 1 SIDE

WORK ORDER #: 0049

XVS(LN)32.2X23.2X.707PRISM2CN
LN PRISM, ITEM B
AR @400-700; 2 SIDES

WORK ORDER #: 0047

Return for
repair!



7 items



Crystal Technology, Inc.

A Siemens Company

1040 EAST MEADOW CIRCLE • PALO ALTO, CA 94303
(415) 856-7911 • FAX (415) 858-0944

QUOTATION NO. Q-7629-C	QUOTATION DATE May 14, 96
---------------------------	------------------------------

QUOTATION FIRM FOR 30 Days

TERMS: NET 30 DAYS
A 1 1/2% late payment charge per month
will be charged on all past due accounts.

FOB: OUR PLANT, PALO ALTO, CA

RECOMMENDED METHOD
OF SHIPMENT

UPS

C# _____

YOUR REFERENCE

Our telecon today

This quotation subject to the above terms
and conditions and those on the reverse
side hereof.

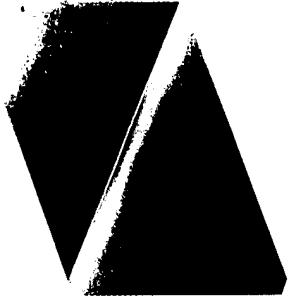
ITEM NO.	QUANTITY	DESCRIPTION	DELIVERY	UNIT PRICE	TOTAL
1	1 lot	Lithium niobate (LiNbO ₃) 45° +<Z>/-<Y> Diameter will be a minimum of 2.0" at the smallest point. Parts are oblong not round. Thickness 0.5mm with -<X> flat. All parts as cut. Minimum 35 parts, could be 45 or more.	5 wks ARO	\$3650.00	

Please reference the above Quotation Number and Part Number on all subsequent correspondence and purchase orders.

RS

Direct tel. (415) 354-0108

BY Randy Stanley
Randy Stanley
Sales Representative
Crystal Products



May 17, 1996

V-A OPTICAL LABS

To: Dr. David Kessler
Eastman Kodak Co.

From: Michael Valliant

Ref: Your request for oriented Lithium Niobate plates

Per our conversation of this week we can provide the
Element A and B polished plates per your Dwg. of 4-17-96.

+ dwgs
from
pol. app.

We quote as follows:

60 total Pcs (30 of A and 30 of B) \$60.00 Ea.

Surface quality to be per side 1 of CTI specification.
You would have cut slices for fab and polishing drop
shipped from CTI.

Delivery would be 4-5 weeks.

We estimate that in large quantity the price would be
\$30.00 to \$35.00.

I am forwarding our brochure by mail for your file.

Sincerely,


Michael Valliant

60 Red Hill Ave.
San Anselmo
CA 94960

415 459.1919
FAX 459.7216

Kodak Eastman Kodak Company

Building 65, KP
Rochester, NY 14650-1822

Fax Cover Sheet

DATE: 6/25/96

TIME: 1:12

TO: Mr. Randy Stanely **FAX** 415 354 0173

CRYSTAL TECHNOLOGY

FROM: David Kessler

PHONE: (716) 477-4735

FAX: (716) 477-0736

E Mail: Dkessler@kodak.com

RE REQUEST FOR QUOTATIONS

CC: -

Number of pages including cover sheet: 2

Message

Dear Randy,

Thanks for the faxes. I think I understand now your terms.

The wafer I need is WAFER LN 4"0 x .0295" 128° R-Y CUT

namely, a 0.75 mm thick wafer, 4" in diameter with Y-Z angle of 127.85 degrees from the +Y axis . The wafer does not need to be polished.

As we discussed over the phone, I would like to have a quotation for 20, 50 and 100 wafers , or a quotation for the whole 4" bull cut into wafers .

I will then send these wafers to different vendors for cutting and polishing down to my final thickness of 0.2906 mm or 0.0114" and coating.

My other option is to have Crystal Technologies do also the cutting and polishing as shown on the next page. I would like to have a quotation for a quantity of 100 pieces of element A and 100 of element B and also a rough order magnetite quotation for 5,000 pieces (per year) of element A and 5,000 pieces of element B .

Thanks.

Dave Kessler



Crystal Technology, Inc.

A Siemens Company

1040 EAST MEADOW CIRCLE • PALO ALTO, CA 94303
(415) 856-7911 • FAX (415) 858-0944

QUOTATION NO.
Q-7675-C

QUOTATION DATE
July 1, 96

30 Days

QUOTATION FIRM FOR _____

TERMS: NET 30 DAYS
A 1½% late payment charge per month
will be charged on all past due accounts.

FOB: OUR PLANT, PALO ALTO, CA

RECOMMENDED METHOD
OF SHIPMENT _____

UPS

C# _____
YOUR REFERENCE

Your fax dated 6/25/96

This quotation subject to the above terms
and conditions and those on the reverse
side hereof.

ITEM NO.	QUANTITY	DESCRIPTION	DELIVERY	UNIT PRICE	TOTAL
1	20	Lithium niobate (LiNbO ₃) 128° Y cuts 100mm diameter x 0.75mm(128° Y) As cut With X flat and minor flat 90° to X flat.	5-6 wks ARO	\$55.00	
2	50	Same as item 1	5-6 wks ARO	\$49.00	
3	100	Same as item 1	5-6 wks ARO	\$35.00	

NOTES:

1. We prefer to not bid on the 100ea. of element A & B. We would be interested in bidding on the large (5000) quantities, as this is our targeted business, when parts are put into production.
2. Please reference the above Quotation Number and Part Number on all subsequent correspondence and purchase orders.

RS

Direct tel. (415) 354-0108

BY Handy Stanley
Handy Stanley
Sales Representative
Crystal Products

Georgia Tech

Georgia Institute of Technology
School of Electrical & Computer Engineering
Optics Laboratory
Atlanta, Georgia 30332-0250 USA

Tel: 404-894-2931
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August 16, 1996

Dr. David Kessler 716-477-0736 fax
Research Laboratories
Building 65
Eastman Kodak Company
Rochester, New York 14650-1822

Dear David,

Following our telephone conversation today, you may wish to look at the following:

A. M. Prokhorov and Y. S. Kuzminov, *Physics and Chemistry of Crystalline Lithium Niobate*. Bristol: Hilger, 1990.
ISBN 0852740026

This book may be of interest to you.

Please stop by Georgia Tech for a visit if you should get to Atlanta.
We would be pleased to have you at any time.

Sincerely,

Tom

Thomas K. Gaylord
Julius Brown Chair
Regents' Professor

Ordered
8/19/96

